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NATIONAL MARINE FISHERIES SERVICE
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ABSTRACT

(Instructions on reverse side)

A total of 11,774,483 pounds of fish and shellfish were reported as landed in Puerto Rico between January 1, 1983 and March 31, 1986. The data reported herein is raw data, no correction factor has been used to account for non-reporting and/or misreporting. Reported landings represent a total value of about \$15.1 million for the three year period. There were 1415 and 1585 fishermen in the 1983 and 1985 census respectively. However, there are a total of 2,660 fishermen currently on our rosters. A total of 5,940 vessels were registered as commercial fishing boats in 1983, while only 3,000 were registered in 1985 (Puerto Rico Ports Authority).

The most abundant fishes in the commercial catch were snappers, groupers and grunts for each year separately as well as for all years. Conch was the most abundant shellfish followed by lobsters. The west coast, as in the past, reported more landings than any other coast for all the three years. Fish pots were the most widely used gear producing 36% of the total landings during the three years.

CORPORATION FOR THE DEVELOPMENT AND ADMINISTRATION OF THE MARINE
LACUSTRINE, AND FLUVIAL RESOURCES

Completion Report to the
National Marine Fisheries Service

NOAA

Entitled

Puerto Rico's Commercial Fisheries Statistics for 1983-1986¹

by

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July 1986

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ABSTRACT

A total of 11,774,483 pounds of fish and shellfish were reported as landed in Puerto Rico between January 1, 1983 and March 31, 1986. The data reported herein is raw data, no correction factor has been used to account for non-reporting and/or mis-reporting. Reported landings represent a total income of about \$15.1 million for the three year period. There were 1,415 and 1,585 fishermen in the 1983 and 1985 census respectively. However, there are a total of 2,660 fishermen currently on our lists. A total of 5,940 vessels were registered as commercial fishing boats in 1983, while only 3,171 were registered in 1985 (Puerto Rico Ports Authority).

The most abundant fishes in the commercial catch were snappers, groupers and grunts for each year separately as well as for all years. Conch was the most abundant shellfish followed by lobsters. The West coast, as in the past, reported more landings than any other coast for all three years. Fish pots were the most widely used gear producing 36% of the total landings during all three years.

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INTRODUCTION

The Commercial Fisheries Statistics Project was established in Puerto Rico in July 1967 under the Commercial Fisheries Research and Development Act of 1964 (PL 88-309) through the sponsorship of the United States Department of the Interior and the Department of Agriculture, Commonwealth of Puerto Rico. In 1979, the newly created Corporation for the Development and Administration of the Marine, Lacustrine, and Fluvial Resources of Puerto Rico (CODREMAR) began to oversee the program's development.

The main goal of this project was to collect and analyze commercial fisheries statistics and related information compatible with the United States Fisheries Statistics System, that would allow a description of the fishing activities around the Island. To satisfy this goal, six segment objectives were distinguished:

1. To collect fisheries statistics data from fishing centers in Puerto Rico using the mechanisms established under previous fisheries statistics projects.
2. To determine gear efficiency, species, relative abundance, and catch composition of landings.
3. To make the data available for biological research to local or foreign scientists interested in fishery studies.
4. To keep record of ex-vessel price per pound per species and the species composition by fishing center on a monthly basis.

5. To maintain a record of each motored vessel (21' to 55') that will include landings data, days at sea, gear used, etc.
6. To provide the necessary data to be included in the annual statistics summary of the United States Department of Commerce.

These objectives were the same in 1983, 1984 and 1985. This project was a continuation of the Commercial Fisheries Statistics Project no. 2-331-R described in the Completion Report of 1979-1982.

PROCEDURES

Commercial fisheries statistics were collected on a daily basis from fishermen, fish buyers, and fishing centers around the island from January 1, 1983 to March 31, 1986. Five field agents visited the 92 island fishing centers comprised of the 42 coastal municipalities, including the islands of Vieques and Culebra, (Fig. 1). One agent covered the area from Vega Baja to Luquillo, the second agent covered Fajardo to Maunabo (including Patillas in 1985), and the islands of Vieques and Culebra. A third agent covered from Patillas (later from Arroyo) to Guayanilla and the fourth and fifth agents covered from Guanica to Cabo Rojo and from Mayaguez to Manati, respectively. Minor changes were made between 1983 and 1985 concerning the distribution of areas but all areas were covered.

Data was collected from fishermen and fish buyers through the use of a fish ticket system (Fig. 2). The data collected included: date, number of trips, hours spent fishing, municipality, fishing center, name of fisherman and/or fish buyer, species (by species or family groups using common names), weight, value (price per pound), and gear used. The data was then transcribed to pre-coded forms to facilitate computer entry (Fig. 3). Data was then processed and tabulated by fishing center, municipality, coast, species, gear, month, and year. Ticket notebooks were distributed to vessel owners, fishermen, fishing associations, and fish buyers to collect information of

the landings made by their vessels, fishermen, members and independent fishermen.

Census data, through a general survey of fishermen, craft and gear was conducted in 1983 and 1985 for all coastal municipalities. The form shown in Fig. 4 was used. Fishermen were interviewed at associations' meetings, at the fishing centers, or at thier homes. (See results for details)

To make data available for biological research, contact was made with the University of Puerto Rico, Department of Marine Sciences, and other agencies. Interested parties were advised that data were avilable, in raw form, concerning landings value, monthly landings by species, etc, except for the names or addresses of the fishermen in order to protect the confidentiality of their statistics.

RESULTS AND DISCUSSION

Commercial fisheries landings data for 1983, 1984, 1985 and January through March, 1986, were entered and edited on an Apple II microcomputer.

Monthly summaries of finfish and shellfish landings were tabulated by municipality, coast, species, and gear and are available. These same summaries were submitted to the Southeast Fisheries Center, NMFS, on an approximately monthly basis. Yearly summaries of these data are included in this report.

The data reported here is raw data. There is no correction factor to account for misreporting or for those landings that go unreported. Previously, raw data was divided by a factor of 0.75 to account for an estimated 25% unreporting. It is thought that the 0.75 correction factor is no longer real. The new correction factor is estimated to lie between 0.61 and 0.56 for 1983 and 1985 respectively. Attempts are currently being made to validate this factor through comparison of fisheries-dependent versus fisheries-independent data collections coupled with an update of the number of local fishermen. Table 1 shows the number of fishermen registered with either the Department of Natural Resources or the Fisheries Research Lab. Table 2 shows the number of tickets gathered monthly in 1982, 1983, 1984, 1985 and January through March, 1986. As can be seen, 1984 shows a decrease of about 40% in the number of tickets collected (i.e. landings reported). The most probable reason for the decrease in reported landings was due to the fishermen's

reaction to the proposed Federal Marine Sanctuary in the area of Parguera, on the South coast of Puerto Rico. Fishermen, affraid that a sanctuary and/or management measures would restrict their fishing rights, are reluctant to cooperate with and submit landings information to government agencies. Such a reaction affects the cooperation of fishermen with laboratory port agents so that fewer tickets are submitted. Also, lack of belief in the strict confidentiality of their landings statistics has been a major factor in the unreporting or misreporting of these data.

It should also be mentioned here that due to the floods and bad weather that occurred in the Island during the months of May and October, 1985, the receipt of landings statistics from fishermen were adversely affected. This was due to the belief of fishermen that CODREMAR was responsible for replacing gear lost during the floods. Presently much of the confusion has cleared and fishermen cooperation has increased.

In 1983, 1984, and 1985 the total yearly landings reported in Puerto Rico were 4,186,058, 3,485,876 and 3,311,046 pounds of fish and shellfish (Tables 3-5) which sold at a combined yearly-average price of \$1.22, 1.32, and 1.42 per pound, respectively. Fish and shellfish yielded 5.1, 4.4 and 4.7 million dollars on the market during the three years. Of the total value of landings reported, fish accounted for a total of \$9,585,380 and shellfish yielded \$4,848,699. Tables 3 through 6 show the distribution of landings and average price per pound by species for 1983, 1984, 1985 and January through March, 1986. From these data, it can be seen that snappers (silk, snappers,

yellowtail, and lane) account for an average 27.2% of the total pounds of fish landed, grunts account for 12.2%, groupers for 12.3%, and parrotfishes for 7.9%. Of the shellfish, conch accounts for 49% of the total landings reported and lobster for 40%. These same species have been the most utilized species in Puerto Rico since 1967 (Juhl and Suarez-Caabro, 1972; Rolon, 1975; Abreu, 1978; Weiler and Suarez-Caabro, 1980; Calderon and Collazo, 1983; Gonzalez, 1985; Garcia-Moliner and Kimmel, 1985). The silk snapper, Lutianus vivanus, accounted for an average 12 % of the total landings reported and it sold at an average wholesale price of \$1.68 per pound. The lobster, however, was the species that sold at the highest average price, \$3.48 per pound. A total of \$3,019,989 were grossed from lobster landings alone.

The total monthly landings and the price per pound of species by coast are available for 1983 to 1986. A yearly summary of landings by municipality and coast for these years are presented in Tables 7 to 10. A summary of landings per coast is reported in Table 11. The West coast was the most productive as previously reported (Suarez-Caabro, 1970; Juhl and Suarez-Caabro, 1972; Suarez-Caabro, 1973; Suarez-Caabro and Rolon, 1974; Rolon, 1975; Suarez-Caabro and Abreu, 1976; Abreu, 1978; Weiler and Suarez - Caabro, 1980; Calderon and Collazo, 1983; Garcia - Moliner and Kimmel, 1985). The only exception to this pattern occurred during 1970 when the East coast reported the highest landings with the West coast second (Juhl and Suarez-Caabro, 1971). The East coast usually ranks as second most productive but, during the period covered by this report (January 1983 to March, 1986) the South coast ranked second and the

East coast third. Tables 7-10 also include an estimate of the reported landings monthly mean by coast. An apparent decrease in monthly mean landings has been detected for all coasts since 1983. As an example, the town of Aguadilla reported 247,467 pounds as landed in 1983 ($x = 20.6$) while only 64,734 pounds were reported in 1985 ($x = 5.4$). This difference might be due to the fact that fishermen from one of the associations are not surrendering statistics. This area in particular is very well known for tuna catches and thus the decrease in reported landings for these species.

The total landings reported by gear for 1983, 1984, 1985, are summarized in Tables 12 through 15. The monthly summaries by species and gear can be made available to any interested parties.

Data was submitted to NMFS on a monthly basis (in summarized or non-summarized form) as proposed and hence are not included with this completion report.

In 1983 a total of 2,296 fishermen were reporting their catch to CODREMAR port agents even though census data only accounted for 1,415 fishermen (Calderon, 1984). No annual fishermen census was conducted for 1984 but the number of fishermen can be determined from our lists, maintained by CODREMAR, of regular suppliers of landings statistics. Our 1984 list shows a total of 2,660 fishermen in Puerto Rico. A similar list maintained by the Department of Natural Resources reports a total of 5,985 registered fishermen of which only 1,295 were active (only, 22%) (telephone conversation with Mr. Julio Velez

from DNR). The Puerto Rico Port Authority have, for 1985, 3,171 boats registered as commercial fishing boats (personal communication, Mr. M. Gonzalez, Acting Director, P.R. Port Authority Electronic Division). From our 1985 census, there a total of 1,585 active fishermen on the island. However, only 842 filled out the requiered forms. Figure 5 shows the number of fishermen in the 1983 (numerator) and the 1985 (denominator) censuses. Tables 16 through 18 show the results'of the census conducted during these two years. The period during which the 1985 census was conducted coincided with the bad weather and floods of October, 1985, when many fishermen lost a lot of gear and fishing equipment. Therefore, the results of the 1985 census are biased in the sense that it underestimates the total number of fishermen, i.e. refusal to cooperate due to no relief funds available for replacing gear lost during the floods, and more drastically by underestimating the type and quantity of gear in use during 1985.

The most widely used gear was the fish pot. Tables 19-21 show yearly summaries (1983-1985) of the total landings reported by gear in Puerto Rico and the percent these represent. A total of 16,045 were reported in 1983 (Calderon, 1984). While the number of pots fished in 1984 is not known, they accounted for over 1.3 million pounds (38%) of total finfish landings (Table 20). The second most productive gear was hook and line, which includes snapper reels and hand lines, and which accounted for 20% of landings. Gill nets were less productive yielding 351,007 pounds (10%). Summaries of these results have been supplied monthly to the Department of Agriculture for

publication in their statistics reports.

In 1985, a total of 9,650 fish pots were reported, 6395 less than in 1983 which accounted for nearly 1.2 million pounds (34%) of the total finfish landings. There are more fish pots being used than those reported here. However, due to the bad timing of the 1985 census, no further statements are possible. The second most productive gear was the snapper reel (Tables 14 and 21) which accounted for 20% of the landings. Gill nets were again the third most productive gear yielding 438,259 pounds or 13% of the total landings. Attempts are being made to gather information (type of gear, number of gear types, etc.) through the Departments of Natural Resources licensing program.

Yearly summaries of the total landings by species and month are presented as Tables 22 through 25. The months with the lowest landings reported were December in 1983 and 1984, May 1985 and March 1986. Possible explanations for these decreased landings include poor weather conditions inhibiting fishing, non-reporting, miss-reporting, natural biological characteristics of the species, and/or decrease data collection effort.

The highest landings were reported during the months of January, 1983 and August, 1984 and 1985. The month of January 1986 represented an apparent increase though statistically non-significant (G test: $p=.05$) in reported landings as compared to the 1984 and 1985 landings for this month.

FIGURES

C O D I F I C A C I O N
Laboratorio Investigaciones Biológicas
Programa Estadística Pesquera

(Front)

Hoja 1

(1) NOMBRE COMPLETO						(2) DISTRITO																											
NOM.	P.	A.	E.	S.	C.	APELLIDOS PATERNOS												APELLIDOS MATERNALES															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
(3) AREA PESCA.						(4) SAHARA				(5) SEXO				(6) EDAD				(7) PESO TOTAL				(8) PRECUMULADA				(9) ARTES							
37						40				43				46				49				52				55				58			
(10) NOMBRE COMPLETO						(11) PESO TOTAL												(12) PRECUMULADA												(13) ARTES			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
(14) NOMBRE COMPLETO						(15) PESO TOTAL												(16) PRECUMULADA												(17) ARTES			
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63			
(18) NOMBRE COMPLETO						(19) PESO TOTAL												(20) PRECUMULADA												(21) ARTES			
64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94			

(Back)

CODIFICACION DE ESPECIES

Arroyado	50
Atun	51
Balao	52
Bonomeolotado	53
Capitan	54
Chapito	55
Chillo	56
Colombia	57
Dotado	58
Gallo	59
Jaca	60
Jurel	61
Luro	62
Marlin Azul	63
Mero	64
Morota	65
On. - Patos	66
Pete Puerto	67
Picua	68
Pluma	69
Robalo	70
Salmote	71
Sota	72
Sardina	73
Sotta	74
Tres Peces	75
Vasa	76
Castorfo	77
Juey	78
Langosta	79
Odon	80
Pulpo	81
Tres Mariscos	82

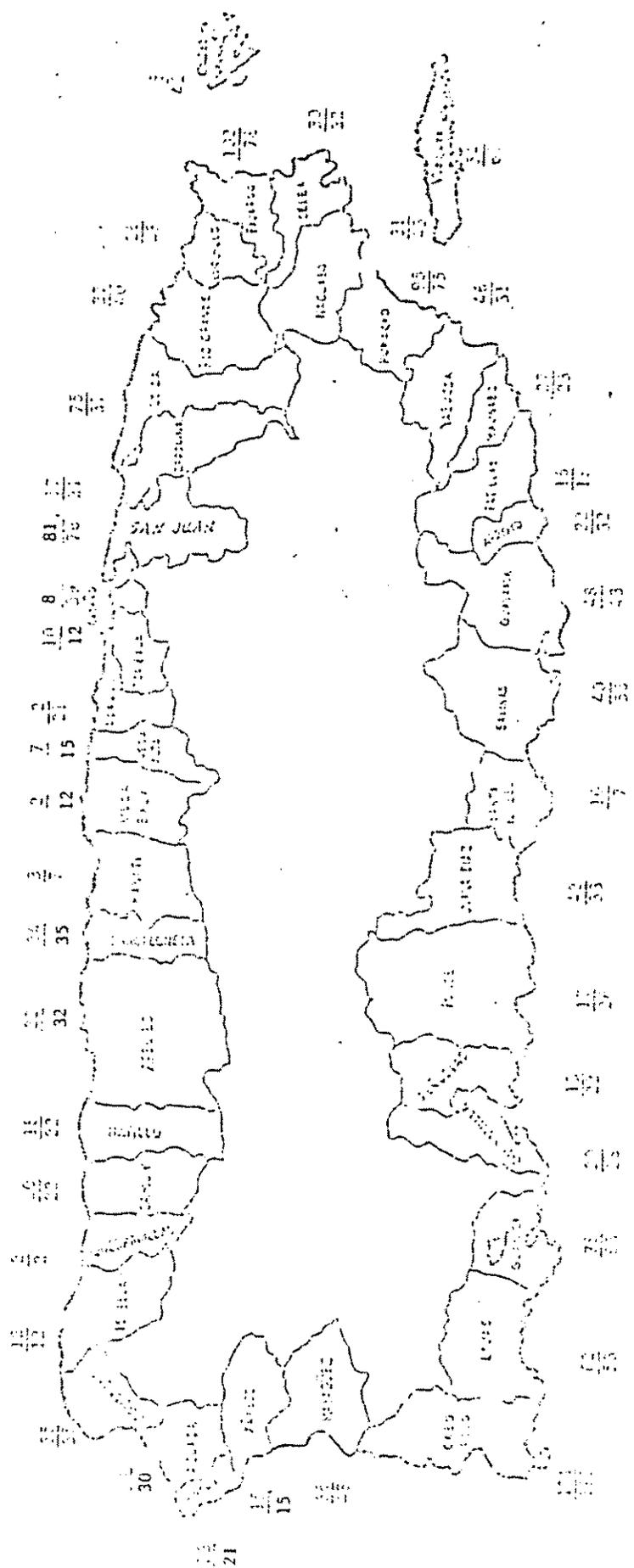
CODIFICACION DE ARTES DE PESCA

Chunchuro	100
Masa	101
Cañon	102
Trasmallo o Filote	103
Cala	104
Silga	105
Carrete	106
Palangres	107
Trampa de Jueyes	108
Alataya	109
Enpa	110
Ollas Atlas	111

FIGURE 3.

Computer Form use to process the catch information for each fisherman

Fig. 1. Total number of fish in the 100 and 1000 Caprus and 1000 Caprus and 1000 Caprus.



1000 Caprus 1,415
 100 Caprus 1,585
 Total number of fish in 100 and 1000 Caprus = 1,415 + 1,585 = 2,990

TABLES

Table 1. Number of fishermen for 1983 and 1985
 (1) interviewed for the census, (2) found
 on our lists, and (3) registered through
 licensing program with Department of
 Natural Resources.

	<u>1983</u>	<u>1985</u>
1. Census	1,417	1,500
2. CODREMAR'S List	2,296	2,660
3. D. N. R.	2,904	2,625
No. of vessels	5,940	3,171

Month	1982	1983	1984	1985	1986
January	Lab. closed	3,680	1,460	1,348	1,025
February	1,020	3,751	1,807	1,244	946
March	1,440	3,589	1,463	1,511	1,448
April	1,549	3,660	1,725	1,370	
May	1,604	3,760	1,860	1,396	
June	2,256	2,829	1,399	1,666	
July	2,209	1,172	1,103	1,306	
August	2,886	1,636	1,755	1,683	
September	3,019	2,205	1,946	1,590	
October	3,684	2,248	1,868	1,083	
November	3,323	1,930	1,167	1,102	
December	2,765	1,172	1,286	961	
TOTAL	25,755	31,632	18,839	16,260	3,419
X	2,146	2,636	1,570	1,355	
S. D.	+ 1,020	+ 988	+ 280	+ 232	

Table 2. Total number of tickets by month for 1982, 1983, 1984 and 1985

Table 3. Recorded fish and shellfish landings, in pounds, reported in Puerto Rico between January-December 1983 by percentage of catch, average (P/Lbs.) and catch value in dollars.

Species	Pounds	%*	% ⁺	\$/Lb.	Value
Arrayado (Lane snapper)	191,347	4.57	5.66	1.06	202,828
Atún (Tuna)	196,105	4.68	5.80	.83	162,767
Balajú (Ballyhoo)	24,476	0.58	0.72	.71	17,378
Boquicolorado (Grunts)	425,870	10.17	12.60	.75	319,403
Capitán (Hogfish)	82,445	1.96	2.43	1.09	89,865
Chapín (Trunkfish)	41,764	0.99	1.23	.93	38,841
Chillo (Silk snapper)	421,125	10.06	12.46	1.66	699,068
Colirrubia (Yellowtail)	180,119	4.30	5.32	1.29	232,354
Dorado (Dolphin)	42,773	1.02	1.26	1.05	44,912
Gallo (Squirrelfish)	21,718	0.51	0.64	.55	11,945
Jarea (Mullet)	57,327	1.36	1.69	.79	45,288
Jurel (Jack)	61,656	1.47	1.82	.91	56,107
Loro (Parrotfish)	232,029	5.54	6.86	.64	148,499
Marlin Azul (Blue Marlin)	11,669	0.27	0.34	1.30	15,170
Mero (Grouper)	353,771	8.45	10.46	1.05	371,460
Mojarra (Mojarra)	13,161	0.31	0.38	.88	11,582
Pargos (Snappers)	68,007	1.62	2.01	1.12	76,168
Peje Puerco (Triggerfish)	96,882	2.31	2.86	.67	64,911
Picúa (Barracuda)	27,179	0.64	0.80	.98	26,635
Pluma (Forgy)	83,104	1.98	2.45	.65	54,018
Robalo (Snook)	42,773	1.02	1.26	1.09	46,623
Salmonete (Goatfish)	167,513	4.00	4.95	.69	115,584
Sama (Mutton snapper)	70,210	1.67	2.07	1.11	77,933
Sardina (Sardine)	22,955	0.54	0.67	.93	21,348
Sierra (Mackerel)	242,373	5.79	7.17	1.18	286,000
Tiburón (Shark)	-	-	-	-	-
Otros peces (Other fish)	201,394	4.81	5.95	1.00	201,394
Total peces (Total fish)	3,379,745	80.73	99.86	1.01	3,413,542
Carrucho (Conch)	437,436	10.44	54.25	1.31	573,041
Lanarosta (Lobster)	294,229	7.02	36.49	3.54	1,041,571
Ostión (Oysters)	54,059	1.29	6.70	1.39	75,142
Pulpo (Octopus)	16,161	0.38	2.00	1.78	28,767
Jueyes (Land crab)	83	**	**	2.93	243
Otros mariscos (Shellfish)	4,345	0.10	0.53	2.86	12,427
Total mariscos (Total)	806,313	19.26	99.97	2.14	1,725,509
TOTAL (TOTAL)	4,186,058	100%	100%	1.22	5,106,991

**less than one

February 1986

Table 15b. CANTIDAD Y VALOR DE LOS DESEMPEÑOS DE PECES EN PUERTO RICO
 POR ESPECIES Y POR ARIZO DE FLECA 1985
 TABLE 1. QUANTITY AND VALUE OF FISH LANDINGS IN PUERTO RICO
 BY SPECIES AND GEAR 1985

	CHINCHOFFO		NASAS		CAJON		TRASHALLO		CALA		SILBA		CARRETE		FALANDEES		TRAMPAJUEYES		ATAHAYA		FLECA		OTRAS		TOTAL		
	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	CANT.	VAL.	
ATUN	0	0	0	0	0	0	11	16	27	63	6295	5742	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BALAJU	289	285	0	0	0	0	132	72	0	0	0	0	0	0	49	48	0	0	0	0	0	0	0	0	0	0	
BOQUICOLORA	211	224	14022	11397	0	0	7012	6385	263	751	398	358	0	0	145	143	0	0	0	0	0	0	0	0	0	0	
CARITAN	0	0	1322	1659	0	0	408	543	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CORFIN	4	2	2894	3635	0	0	620	1022	67	80	0	0	0	0	0	0	0	0	0	0	642	1217	37	55	2459	3476	
DORADO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GALLO	0	0	1606	926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JAREO	253	249	113	69	0	0	3315	2676	220	195	0	0	0	0	0	0	0	0	0	0	165	82	0	0	1551	1978	
JUREL	1061	764	127	68	0	0	963	814	878	753	473	347	0	0	0	0	0	0	0	0	15	11	0	0	0	0	
LORO	376	406	8119	2622	0	0	6254	5922	428	331	47	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MARLIN AZUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MERO	14	14	6781	9299	0	0	309	344	19674	13162	20	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MOJARRA	315	233	60	60	0	0	641	621	40	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PARGOS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ARRAYADO	5	3	2712	3307	0	0	481	606	2348	3092	0	0	0	0	989	1414	0	0	0	0	77	106	0	0	6512	6520	
COLIRRUBIA	1743	1975	1604	1965	0	0	1425	1931	3222	4938	377	378	29	30	102	121	0	0	0	0	0	0	0	0	0	0	
CHILLO	0	0	4497	7337	0	0	124	248	41379	81906	38	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SARA	56	52	637	885	0	0	1264	1595	675	945	0	0	0	0	468	622	0	0	0	0	106	102	0	0	43144	6722	
OTROS PARCO	220	172	341	427	0	0	1575	1793	597	809	0	0	0	0	0	0	0	0	0	0	25	44	0	0	2568	5125	
PEJE FUERCO	0	0	1826	1613	0	0	0	7	295	457	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PICLA	1626	949	0	0	0	0	42	42	475	664	260	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FLUFA	49	47	626	544	0	0	346	202	29	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RUBALO	320	290	0	0	0	0	1574	1956	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SALMONETE	0	0	2443	2375	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SARDINA	49	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SILFRA	192	231	0	0	0	0	2401	3374	240	274	2616	3404	0	0	0	0	0	0	0	0	1415	1392	0	0	0	0	
TIBURON	18	18	0	0	0	0	246	123	1071	600	40	29	0	0	0	0	0	0	0	0	104	130	0	0	0	0	
OTROS PECES	2777	2490	6176	6623	0	0	7056	6350	3205	3424	91	75	0	0	116	85	0	0	0	0	0	0	0	0	0	0	
TOTAL PECES	7960	8461	28436	28137	0	0	38067	39200	75428	112613	13107	15097	20	20	2153	2636	0	0	0	0	1559	1563	2245	3244	37	55	
CARRUCHO	0	0	21	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JOEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LANGOSTA	0	0	13217	48115	1625	6005	247	944	146	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OSTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FULFO	0	0	686	1170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OTROS MARIS	142	353	62	59	0	0	69	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	10110	8816	72452	107559	1625	6005	28163	40214	75594	112800	13107	15097	20	20	2153	2636	0	0	0	0	1559	1563	4071	9513	14533	26331	

Table 17. Length distribution of fishing crafts in Puerto Rico, 1983-1985.

<u>Length (Ft.)</u>	<u>1983</u>	<u>1985</u>
7-9	2	-
10-12	31	14
13-15	180	77
16-18	584	315
19-21	163	100
22-24	63	59
25-27	38	8
28-30	29	17
31-33	11	3
34-36	8	10
> 36	16	8
TOTAL	1125	611

Table 18 . Summary of operating gears, and percent of the total in Puerto Rico, 1983-1985.

<u>Gear</u>	<u>1983</u>	<u>%</u>	<u>1985</u>	<u>%</u>
Beach seine	299	.9	235	.9
Fish pots	16,045	49.9	9,650	40.5
Lobster pots	3,402	10.6	2,218	9.3
Gill nets	1,067	3.3	699	2.9
Hand lines	4,280	13.3	8,131	34.2
Troll lines	2,473	7.7	1,084	4.65
Reels	1,097	3.4	300	1.3
Long lines	416	1.3	355	1.5
Cast nets	1,376	4.3	717	3.0
Spears	602	1.9	163	.7
Others	542	1.7	183	.8
By hand	536	1.7	77	.3
TOTAL	32,135		23,812	

Table 24. Quantity and value of fish and shellfish by species and month for 1985.

Species (Especies)	January (Enero)		February (Febrero)		March (Marzo)		April (Abril)		May (Mayo)		June (Junio)		July (Julio)		August (Agosto)		September (Septiembre)		October (Octubre)		November (Noviembre)		December (Diciembre)		TOTAL					
	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L				
Lane Snapper (Artravain)	9,389	1.06	10,628	1.10	12,972	1.17	11,430	1.26	7,643	1.33	7,901	1.32	10,753	1.35	18,778	1.41	11,010	1.36	10,220	1.39	9,382	1.30	11,747	1.32	13,453	1.28	134,453	1.28		
Tuna (Atún)	3,583	.87	3,928	.78	4,671	.90	6,896	.97	11,531	.82	11,735	.74	11,614	.85	7,313	.87	2,789	.79	3,910	.77	2,897	.90	8,099	.82	78,964	.83	248,964	.83		
Billobo (Bilabó)	1,728	.80	795	.83	1,653	.86	1,000	.71	707	.57	870	.91	1,021	.95	1,693	.83	1,316	.70	2,430	1.01	5,664	.67	2,849	.88	21,574	.80	38,574	.80		
Grunt (Socorro Colorado)	23,728	.80	23,531	.82	24,728	.91	26,296	1.11	18,371	.93	21,915	.87	22,423	.84	43,133	.86	31,877	.88	26,855	.83	26,226	.85	23,801	.94	314,826	.89	1,000,000	.89		
Forfish (Caribio)	6,460	1.51	4,401	1.50	4,132	1.46	3,917	1.45	1,334	1.44	2,171	1.31	2,171	1.31	3,176	1.37	4,333	1.43	3,561	1.56	4,890	1.45	5,090	1.27	47,329	1.42	100,000	1.42		
Trunkfish (Caribio)	3,932	.89	4,225	1.00	4,030	1.25	3,389	.96	2,184	1.08	3,603	1.05	3,528	.86	4,526	1.08	2,106	1.05	4,257	1.20	1,875	1.22	1,583	1.22	41,518	1.06	100,000	1.06		
Filet Snapper (Chillo)	25,073	1.84	26,301	1.81	36,804	1.91	40,331	2.10	43,109	2.08	32,523	1.97	41,221	1.97	35,351	1.92	31,732	1.98	40,870	1.96	31,491	1.93	31,429	1.94	417,425	1.96	1,000,000	1.96		
Yellowtail (Columbina)	10,613	1.31	13,745	1.41	10,393	1.39	14,727	1.34	10,107	1.47	9,531	1.34	10,476	1.34	37,102	1.24	16,681	1.34	14,220	1.36	12,602	1.23	10,974	1.29	169,481	1.34	1,000,000	1.34		
Dolphin (Corado)	2,349	1.20	2,061	1.52	743	1.16	1,125	1.23	2,590	.89	1,232	.89	967	1.12	578	.70	410	.81	693	1.35	2,619	1.25	4,819	1.10	22,218	1.13	100,000	1.13		
Southern Fish (Galeo)	375	.85	1,307	.54	1,219	.63	762	.75	854	.76	952	.83	1,744	.58	1,815	.92	1,979	.56	2,059	1.19	2,560	.53	1,721	.59	17,150	.77	100,000	.77		
Muller (Jareca)	4,065	.65	3,352	.74	3,943	.94	3,411	.91	2,021	.74	3,512	.57	6,799	.97	5,277	.72	4,230	.61	4,046	.87	3,177	.83	2,827	.81	49,122	.80	100,000	.80		
Jack (Jurel)	1,958	.70	1,825	1.14	1,217	1.17	2,952	.93	2,870	.86	3,405	.87	2,740	1.04	10,329	.99	10,281	.98	1,444	.99	1,927	.83	1,598	.74	42,556	.96	100,000	.96		
Parrotfish (Loro)	22,758	.70	26,790	.62	30,066	.66	21,778	.70	13,573	.77	16,345	.69	26,549	.64	25,795	.70	19,065	.68	11,553	.67	11,990	.68	11,765	.70	239,030	.68	1,000,000	.68		
Blue Marlin (Marlin Azul)	381	1.27	54	1.50	164	1.37	236	.60	418	.73	425	1.26	1,112	1.22	4,296	1.39	1,613	.93	1,150	2.00	590	1.27	646	.96	11,077	1.45	100,000	1.45		
Groupers (Mero)	36,742	1.15	23,810	1.09	23,563	1.12	24,750	1.42	23,823	1.32	22,773	1.24	32,312	1.08	33,323	1.23	29,868	1.21	25,771	1.21	32,092	.99	24,639	1.17	351,286	1.18	1,000,000	1.18		
Milnera (Mojarra)	397	.92	859	.93	1,391	.96	1,825	1.05	484	.85	344	.63	1,636	.84	2,180	1.00	337	.87	510	.67	517	.52	1,444	.71	11,483	.87	100,000	.87		
Snappers (Pargos)	3,799	1.04	2,473	1.04	2,671	1.16	3,882	1.22	1,896	1.43	2,420	1.31	2,309	1.41	4,743	1.22	3,439	1.25	3,899	1.16	2,384	1.29	2,199	1.34	36,614	1.22	100,000	1.22		
Tringfish (Pala Puercal)	4,787	.77	3,460	.77	6,199	.86	6,139	.92	1,535	.99	2,408	1.03	4,537	.84	6,539	.88	5,181	.89	3,167	.93	3,497	.79	3,802	.98	53,252	.87	100,000	.87		
Barracuda (Picuda)	706	1.11	326	.93	1,095	1.08	1,389	.76	782	1.04	936	1.10	530	1.37	971	1.05	534	2.33	564	.89	495	.84	1,580	1.37	10,507	1.13	100,000	1.13		
Porry (Puma)	2,842	.93	2,114	.79	5,352	.67	3,171	.99	1,077	1.10	647	.87	1,185	1.14	4,534	1.03	1,945	.92	1,401	.82	1,232	.86	1,932	.94	27,482	.88	100,000	.88		
Snook (Sabal)	1,048	1.01	1,704	1.20	1,722	1.29	3,126	1.38	3,101	1.41	3,278	1.17	2,632	1.39	2,259	1.24	2,713	1.09	3,044	.98	2,185	1.01	874	1.22	28,226	1.19	100,000	1.19		
Goatfish (Salmueta)	9,300	.67	7,513	.68	8,164	.63	3,256	.99	894	1.07	1,261	.93	2,364	.62	4,088	1.03	3,482	.97	6,682	.81	7,450	.97	6,345	1.04	60,932	.82	100,000	.82		
Mutton Snapper (Cama)	2,979	1.21	3,210	1.27	5,031	1.22	3,331	1.32	4,144	1.39	5,411	1.23	3,752	1.29	6,216	1.29	5,977	1.27	3,647	1.25	2,501	1.31	4,394	1.33	51,236	1.29	100,000	1.29		
Sardines (Sardinia)	1,129	1.13	1,561	.95	2,340	.95	1,710	1.11	2,523	1.02	1,352	.78	1,352	.78	2,853	.94	1,896	.95	2,639	.98	1,982	.95	1,375	.85	1,124	.76	22,784	.95	100,000	.95
Macreral (Sierca)	10,494	1.25	8,473	1.28	9,193	1.27	15,359	1.23	21,870	1.25	19,388	1.17	16,194	1.41	22,578	1.30	7,162	1.27	4,970	1.33	8,434	1.33	9,786	1.28	153,833	1.29	1,000,000	1.29		
Shark (Tiburón)	776	.92	1,053	.65	483	.65	464	.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other fish (Otros peces)	10,418	.97	11,959	.87	19,219	.92	14,714	1.07	18,669	.99	22,482	.93	15,878	1.08	37,459	1.19	25,431	1.42	22,798	1.40	18,770	1.02	24,851	1.43	236,948	1.15	1,000,000	1.15		
Total fish (Total peces)	201,674	1.09	192,317	1.07	221,423	1.14	219,973	1.30	198,553	1.32	199,403	1.19	232,560	1.17	321,721	1.19	221,217	1.21	227,749	1.27	204,494	1.11	204,284	1.24	264,284	1.24	2,640,000	1.20		
Crabs (Cangrejos)	26,845	1.43	19,937	1.49	27,922	1.49	27,842	1.47	21,223	1.40	26,203	1.48	26,314	1.37	24,359	1.35	21,534	1.47	14,370	1.47	18,547	1.41	18,631	2.00	325,343	1.43	1,000,000	1.43		
Shrimp (Camarones)	22,234	3.78	20,415	3.76	21,343	3.72	19,182	3.67	10,649	3.60	11,250	3.59	14,564	3.58	36,469	3.75	21,907	3.71	20,129	3.75	22,106	3.73	24,931	3.56	248,041	3.71	1,000,000	3.71		
Oysters (Ostiones)	1,065	1.25	1,575	1.25	2,103	1.27	2,320	1.33	2,160	1.23	-	-	868	1.23	145	1.20	9,500	1.00	-	-	17,540	1.25	-	-	38,413	1.19	100,000	1.19		
Scallops (Pulpos)	1,595	1.61	913	2.05	899	1.79	765	2.06	395	1.95	673	1.99	917	1.95	2,559	2.72	2,128	1.93	2,674	1.98	4,839	1.84	13,136	1.19	31,234	1.81	100,000	1.81		
Land Crab (Cangrejo)	10	3.00	-	-	815	3.00	459	3.00	490	3.00	319	3.00	-	-	174	3.00	1,043	3.00	85	3.00	-	276	3.00	16	3.00	3,729	3.00	100,000	3.00	
Shellfish (Otros mariscos)	69	2.67	100	3.30	133	2.24	329	2.37	156	1.76	716	1.48	1,058	1.62	324	1.01	177	1.74	228	2.43	249	1.65	-	-	67,876	1.67	100,000	1.67		
Total shellfish (Total mariscos)	52,029	2.47	44,130	2.64	55,329	2.44	51,977	2.33	36,314	2.07	39,143	2.14	43,721	2.12	114,650	2.13	76,491	2.10	37,637	2.71	51,732	2.52	54,591	2.19	617,016	2.19	1,000,000	2.19		
TOTAL (TOTAL)	253,703	1.37	236,447	1.36	276,752	1.39	271,950	1.49	234,867	1.44	238,546	1.35	276,281	1.35	438,401	1.43	297,708	1.42	245,456	1.49										

Table 12. Quantity and value of fish and shellfish by species and gear for 1983.

Species (Especies)	Beach Seine (Chinchero)		Fish Pot (nasa)		Lobster Pot (Cajones)		Gill net (Trasallo)		Line* (cordel)		Trot line (Saiga)		Trot line ** (Palanete)		Cast Net (Atarraya)		- Snear (Fispa)		By Hand (A mano)		Total (Total)			
	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L		
Lane Snapper (Arrayado)	16,244	1.06	88,523	1.02			23	1.25	66,144	1.13	161	1.16	20,252	1.03									191,347	1.06
Tuna (Atún)	17,468	.85	53	1.00							178,583	.83											196,105	.83
Gallyhoo (Zalete)	9,290	.77	130	1.00			14,708	.67	350	1.00												24,476	.71	
Grunt (Socolesotado)	24,809	.76	311,052	.72			70,950	.79	19,022	1.01							38	1.02				425,870	.75	
Sea bream (Carpas)			19,022	1.11					1,887	1.36							61,536	1.08				82,445	1.09	
Trunkfish (Chapín)	365	.92	40,494	.93			906	.99														41,764	.93	
Silk Snapper (Chililo)	2,539	1.42	59,563	1.63					359,024	1.66												421,125	1.56	
Yellowtail (Colirubia)	19,067	1.03	55,121	1.10			7,906	1.13	93,824	1.47			4,201	1.12								180,119	1.29	
Dolphin (Corado)												42,773	1.05									42,773	1.05	
Squid (Callo)	440	.76	18,549	.47			572	.88	2,157	1.08												21,718	.55	
Muller (Jareta)	11,419	.89	38	1.00			43,231	.75	7	.50					2,582	1.03						57,327	.79	
Jack (Jorel)	34,379	.85	2,893	1.01			9,727	.94	14,652	1.03							6	2.00				61,656	.91	
Parrotfish (Loro)	4,316	.96	136,760	.67			87,537	.55									134	1.45				232,029	.64	
Blue Marlin (Marlin Azul)							31	1.25	165,196	1.05												11,669	1.30	
Grouper (Mero)	10,547	1.20	176,330	1.04			12,912	.88							249	.78			1,667	1.17		353,771	1.05	
Mojarra (Mojarra)							31,427	1.04	10,561	1.53		18	1.10									13,161	.88	
Snappers (Pargos)	2,672	.97	18,655	.97					9,819	.95		57	1.09						4,675	1.28		68,007	1.12	
Trapperfish (Fete Puerco)	1,591	.75	85,415	.64					2,142	1.00												96,892	.67	
Barracuda (Picúa)	12,493	.90	212	1.00			3,401	.91	410	1.49		10,664	1.07									27,179	.98	
Perry (Pluma)	5,702	.79	66,080	.62			9,123	.66	2,142	1.00		58	.87									83,104	.65	
Snook (Botalo)	11,055	1.08	2,384	.98			23,723	1.05	5,612	1.33												42,773	1.09	
Goatfish (Salmonete)			167,513	.69																		167,513	.69	
Mutton Snapper (Fana)	4,151	1.00	41,972	1.07			3,705	1.02	19,037	1.25			680	1.17								70,210	1.11	
Sardine (Sardina)	1,669	.91					8,716	.85						12,501	1.00							22,955	.93	
Mackerel (Sierra)	17,346	1.15	2,724	1.10			20,895	1.18	2,963	.98		198,097	1.19									348	1.10	
Shark (Tiburón)																								
Other fish (Otros peces)	45,340	.84	40,917	1.02			76,497	1.04	34,929	1.12		378	1.03	1,940	.93	1,226	.73			154	2.00		201,394	1.00
Total fish (Total peces)	752,902	.97	1,374,400	.85			426,040	.84	811,020	1.39	442,460	1.03	27,072	1.04	16,558	.98	69,293	1.10					1,179,745	1.01
Crab (Carrucho)					12,693	3.44	2	4.25													437,436	1.31	437,436	1.31
Lobster (Lancosta)	477	3.50	162,160	2.52																	104,806	3.57	14,091	3.68
Oysters (Ostropes)																							54,059	1.39
Octopus (Pulpo)	180	1.90	3,559	1.84			41	1.35						9	3.50						8,025	1.71	4,347	1.85
Land Crab (Jaca)																						83	2.93	
Shellfish (Otros mariscos)	93	4.00	705	2.80																		64	4.00	
Total shellfish (Total mariscos)	750	1.19	166,424	3.48	12,693	3.44	43	1.50						9	3.50						112,895	3.44	512,499	1.40
Total (TOTAL)	253,652	.93	1,500,824	1.14	12,693	3.44	474,083	.86	811,020	1.39	442,460	1.03	27,072	1.04	16,567	.98	182,189	2.55			513,498	1.40	4,186,058	1.22

*Hand line, snapper reel (cala, carrete, etc.)
 **Long line

Table 25. Quantity of Fish Landings in Puerto Rico by species and month, 1956.

Species (Especie)	January		February		March		TOTAL	
	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L
Lane Snapper (Arrayado)	10,007	1.28	6,612	1.29	11,184	1.37	27,803	1.31
Tuna (Atún)	14,553	.84	6,253	.93	1,882	.86	22,688	.87
Ballyhoo (Balajú)	795	.66	570	.69	1,202	.72	2,567	.69
Grunt (Boquicolorado)	24,830	.92	22,351	.86	27,444	.91	74,625	.89
Hogfish (Capitán)	3,751	1.39	2,639	1.31	3,014	1.47	9,404	1.39
Trunkfish (Chapín)	3,398	1.01	3,653	1.31	3,661	1.31	10,712	1.21
Silk Snapper (Chillo)	36,448	1.94	46,144	1.94	37,371	1.93	119,963	1.93
Yellowtail (Collirubia)	12,695	1.47	8,736	1.29	10,863	1.40	32,294	1.38
Dolphin (Dorado)	10,471	.97	2,592	1.63	1,067	1.09	14,130	1.23
Squirrelfish (Gallo)	2,269	.57	1,851	.54	1,254	.86	5,374	.65
Mullet (Jarea)	3,570	.78	3,916	.82	3,287	.87	10,773	.82
Jack (Jurel)	9,261	.64	3,502	.78	3,139	1.16	15,902	.86
Parrotfish (Loro)	17,083	.75	15,636	.84	13,740	.81	46,459	.80
Blue Marlin (Marlin Azul)	1,785	1.76	-	-	651	1.33	2,436	1.54
Grouper (Mero)	38,804	1.22	29,451	.80	17,470	1.32	85,725	1.11
Mojarra (Mojarra)	1,497	.88	1,061	.91	1,703	.91	4,261	.90
Snappers (Pargos)	2,103	1.29	2,568	1.29	1,701	1.61	6,372	1.39
Triggerfish (Peje Puerco)	5,195	.93	2,132	.97	4,352	1.03	11,679	.97
Barracuda (Picúa)	4,335	1.02	2,473	.76	2,345	1.02	9,153	.93
Porgy (Pluma)	1,988	.82	1,041	.78	818	.85	3,847	.81
Snook (Robalo)	2,894	1.17	1,986	1.16	1,885	.92	6,765	1.08
Goatfish (Salmonete)	6,604	1.06	2,446	.97	2,352	.97	11,402	1.00
Mutton Snapper (Sama)	3,274	1.34	3,370	1.24	3,190	1.48	9,834	1.35
Sardine (Sardina)	2,488	.98	1,455	.98	1,884	1.01	5,827	.99
Mackerel (Sierra)	14,532	1.34	5,553	1.34	9,519	1.36	29,604	1.34
Shark (Tiburón)	2,740	.77	1,491	.57	1,388	.60	5,619	.64
Other fish (Otros peces)	23,809	1.03	21,626	1.00	25,439	1.01	70,874	1.01
Total fish (Total peces)	261,179	1.17	201,108	1.19	193,805	1.26	656,092	1.20
Conch (Carrucho)	20,342	1.51	12,211	1.52	24,232	1.51	56,785	1.51
Land Crab (jueyes)	57	3.00	26	3.00	9,767	3.00	9,850	3.00
Lobster (Langosta)	21,079	3.69	18,743	3.62	22,345	3.74	62,167	3.68
Oysters (Ostiones)	-	-	-	-	500	1.00	500	1.00
Octopus (Pulpo)	1,648	1.82	1,317	1.70	1,457	2.03	4,422	1.85
Shellfish (Otros mariscos)	737	1.48	273	1.77	678	1.87	1,688	1.70
Total shellfish (Total mariscos)	43,863	2.57	32,570	2.73	58,979	2.61	135,412	2.63
TOTAL	305,042	1.37	233,678	1.40	252,784	1.57	791,504	1.44

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Table 13. Quantity and value of fish and shellfish by species and gear for 1984.

Species (Especies)	Beach Seine (Chinchorro)		Fish Pot (nasa)		Lobster Pot (Cajones)		Gill net (Trasmallo)		Line* (Cordel)		Trot line (Sila)		Trot line (Palangre)		Cast Net (Atarraya)		Spear (Pisga)		By Hand (A mano)		TOTAL					
	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L				
Lane Snapper (Arroyado)	14,045	1.11	74,508	1.09					61,018	1.17																
Tuna (Atún)	15,971	.74												18,974	1.07	870	1.07						169,415	1.12		
Lallyhco (Balejo)	11,214	.90						5,466	.53			55,264	.82										71,225	.80		
Grunt (Boquiclorado)	17,801	.72	282,082	.77				52,064	.80	12,035	1.14												16,680	.78		
Trunkfish (Chasin)	20	1.50	43,031	.91				1,395	1.10	2,671	1.33												243,982	.73		
Silk Snapper (Cillo)			60,641	1.76				881	1.04								52,625	1.15					75,455	1.15		
Yellowtail (Colirrubia)	15,457	1.04	40,432	1.12				6,545	1.15	316,310	1.79												43,932	.91		
Dolphin (Dorado)										83,240	1.41			491	1.38									377,151	1.79	
Squirrelfish (Gallo)	32	.50	8,439	.39				290	1.03	2,734	.98	15,299	1.25											148,165	1.23	
Mullet (Jarea)	16,138	.96						29,497	.83															15,299	1.25	
Jack (Jurel)	9,968	.85	2,393	.79				8,242	.71							850	1.13							11,495	.55	
Parrotfish (Loro)	1,253	1.01	148,570	.69				89,059	.62															45,490	.83	
Blue Marlin (Marlin Azul)										4,385	1.08													34,281	.89	
Grouper (Mero)	6,571	1.22	190,575	1.08								9,557	1.48											243,597	.67	
Mojarra (Mojarra)										149,840	1.10													9,557	1.48	
Snappers (Pargos)	2,448	1.03	14,199	1.02				11,979	.76															344,936	1.09	
Triggerfish (Peje Puerco)	898	.91	70,373	.69				16,530	1.11	6,254	1.68					289	.78							12,280	.76	
Barracuda (Picuda)	4,752	.94								10,250	1.20							995	1.33					43,426	1.17	
Porry (Piama)	5,183	.68	51,291	.73				792	.83			7,097	1.37											81,521	.76	
Snork (Robalo)	7,267	1.17	293	1.02				11,605	.67	1,594	1.11													12,641	1.17	
Goatfish (Salmorete)			134,034	.73				22,855	1.25	1,786	1.41													69,678	.72	
Mutton Snapper (Sama)	5,878	1.13	32,036	1.07				1,896	1.10	18,442	1.23													32,199	1.24	
Sardine (Sardina)	1,271	.93						1,697	1.08							953	1.26							154,034	.73	
Mackerel (Sierra)	9,101	1.15						13,843	1.17															61,205	1.13	
Shark (Tiburón)			400	1.00								150,224	1.19											20,561	1.06	
Other fish (Otros peces)	32,141	.99	25,736	1.11				74,371	.96	34,264	1.18			2,950	.89										173,169	1.19
Total fish (Total peces)	177,414	.96	1,193,097	.91				351,007	.85	722,938	1.46	237,441	1.12	24,150	1.06	20,225	1.07	53,420	1.25						167,612	1.03
Coch (Carrucho)																									2,354,843	1.07
Lobster (Langosta)			145,152	3.68	26,494	3.40																			344,737	1.37
Oysters (Ostiones)																		105,226	3.72	344,737	1.37				344,737	1.37
Octopus (Pulpo)			4,659	2.03																					283,282	3.67
Land Crab (Juey)					1,529	3.00																			47,544	1.26
Shellfish (Otros mariscos)			3,079	3.59																					17,924	1.93
Total shellfish (Total mariscos)			152,890	3.59	28,023	3.33																			3,740	2.45
																									6,819	2.16
TOTAL (TOTAL)	177,414	.96	1,150,987	1.21	28,023	3.33	351,007	.85	722,938	1.46	237,441	1.12	24,150	1.06	20,225	1.07	170,406	2.73	403,315	1.40					7,485,876	1.17

*Hand line, snapper reel
**Loop line

Table 14. Quantity and value of fish and shellfish by species and gear for 1985.

Species (Especies)	Linen Trawl (Transtrawl)		Fish Trawl (Mata)		Lobster Trawl (Palangres)		SHELL Trawl (Cascarillas)		Reel (Carreces)		Line* (Linea)		Trawl Line (Salpa)		Trawl Line** (Palangres)		Cast Net (Alfarras)		Spear (Flepa)		Other Gears (Otras Artes)		By Hand (A Mano)		TOTAL						
	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.					
Lana Snapper (Lanzalata)	6,507	1.06	56,103	1.23	73	.97	12,076	1.36	705	1.72	41,065	1.36			17,359	1.25	99	1.09	271	1.25							124,443	1.23			
Lana (Lana)	13,822	.79					2,991	.84	2,226	.66	3,605	1.22			205	1.16											78,296	.82			
Salpa (Salpa)	8,717	.81					11,186	.77																			21,476	.79			
Tomar (Tomar)	9,419	.78	231,179	1.27	36	1.05	56,296	.87	126	1.18	16,375	1.08			393	.82	72	.93	410	.82							316,216	1.25			
Sea Fish (Carpa)	10	1.20	13,256	1.28	14	.92	347	1.18							37	.78	170	1.24	27,305	1.23							47,929	1.22			
Tomar (Carpa)	177	.78	36,256	1.05	104	.71	2,935	1.13	15	.40	543	.92			12	.75	27	1.00	1,579	1.15							41,812	1.10			
Sea Snapper (Lanzalata)	1,056	1.01	73,287	1.80	12	1.50	15,611	1.80	74,692	2.23	250,592	1.94			323	1.74	82	2.07									417,215	1.84			
Yellowtail (Lanzalata)	7,468	1.10	53,977	1.17	11	1.18	13,298	1.13			94,041	1.49					455	1.29	322	1.31	119	1.29					165,291	1.34			
Yellowtail (Lanzalata)							1,127	1.55			207	1.54	2,243	1.60	18,624	1.04											22,016	1.10			
Yellowtail (Lanzalata)							421	.96			158	.85	2,464	.92													17,212	.77			
Yellowtail (Lanzalata)							44,375	.78							154	.39	1,512	1.12			13	1.46					49,122	.80			
Yellowtail (Lanzalata)	2,508	.78	360	.83			19,152	.97			3,453	1.16			777	.77	8	1.00			84	1.54					42,558	.86			
Yellowtail (Lanzalata)	9,393	.89	1,282	.82			85,927	.71			84	.82	10,502	1.52			82	.96			1,943	1.31					129,730	.85			
Yellowtail (Lanzalata)	4,040	.85	142,245	.84	28	.82									569	.81											11,027	1.02			
Yellowtail (Lanzalata)							4,220	1.25	32,174	1.09	100,723	1.24			325	1.65	24	1.25	27,972	.96							353,204	1.21			
Yellowtail (Lanzalata)	149	1.04	185,479	1.25			9,414	.84									132	.69									11,687	.87			
Yellowtail (Lanzalata)	1,265	.86	622	1.22			13,728	1.30			433	1.40	11,353	1.19														39,411	1.21		
Yellowtail (Lanzalata)	2,478	1.04	7,872	1.25			495	1.19			172	.76	5,467	1.19							1,859	1.05					55,222	.87			
Yellowtail (Lanzalata)	244	.82	46,810	.82			1,819	.9			167	1.78	2,700	1.29														10,867	1.19		
Yellowtail (Lanzalata)	2,226	.86	215	.74			4,394	.71			65	1.00	1,771	1.10	2,738	1.28												27,422	.75		
Yellowtail (Lanzalata)	2,903	.80	12,314	.92			19,481	1.16			228	1.03	2,672	1.50														26,226	1.18		
Yellowtail (Lanzalata)	2,984	1.16	556	.85			648	.81																				67,352	.81		
Yellowtail (Lanzalata)	84	1.14	82,076	.81	33	1.18																						178	1.44		
Yellowtail (Lanzalata)	1,904	1.03	21,081	1.19	38	.71	7,285	1.18	1,436	1.62	10,194	1.65																12,500	1.18		
Yellowtail (Lanzalata)	1,389	.57					2,858	1.10																				24,744	.76		
Yellowtail (Lanzalata)	19,702	1.27					17,165	1.30	9,213	1.31	19,752	1.35	91,783	1.27														153,253	1.21		
Yellowtail (Lanzalata)							2,061	.53			897	.82																5,704	.71		
Yellowtail (Lanzalata)							80,797	1.10			52,715	1.40																153,253	1.21		
Yellowtail (Lanzalata)																													1,704	.71	
Yellowtail (Lanzalata)																													236,948	1.15	
Yellowtail (Lanzalata)	131,633	.61	1,212,238	1.02	524	.82	670,329	.89	126,724	1.21	645,670	1.37	179,242	1.08	26,767	1.14	24,207	.95	73,216	1.24								1,660,000	1.07		
Yellowtail (Lanzalata)							770	.45																					329,213	1.03	
Yellowtail (Lanzalata)	735	2.57	129,118	3.61	15,599	3.62	6,849	3.44																					249,261	3.71	
Yellowtail (Lanzalata)																													28,413	1.19	
Yellowtail (Lanzalata)	191	1.87	3,275	1.91	23	1.73	34	1.11																					35,284	2.01	
Yellowtail (Lanzalata)																														3,719	2.00
Yellowtail (Lanzalata)	443	1.92	341	1.35	16	1.75	268	1.05																					3,804	1.87	
Yellowtail (Lanzalata)	1,348	2.49	191,724	3.56	15,618	3.47	7,321	3.18																						431,216	2.22
Yellowtail (Lanzalata)																															
TOTAL (TOTAL)	137,022	.97	1,319,249	1.22	14,174	2.73	678,249	1.22	127,724	1.21	645,670	1.37	179,242	1.08	26,767	1.14	24,207	.96	164,176	2.54	398,003	1.51	3,729	1.00	1,314,244	2.22					

*Hand line, snapper reel
**Trawl line

Table 22. Quantity and value of fish and shellfish by species and month for 1983.

Species (Especies)	January (Enero)		February (Febrero)		March (Marzo)		April (Abril)		May (Mayo)		June (Junio)		July (Julio)		August (Agosto)		September (Septiembre)		October (Octubre)		November (Noviembre)		December (Diciembre)		TOTAL	
	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L	Lbs.	P/L		
Lana Snapper(Arrayado)	16,498	1.07	16,527	1.04	18,688	1.09	19,053	1.07	18,055	1.06	13,158	1.08	12,358	1.12	15,030	1.06	23,139	1.04	15,114	1.04	14,680	1.05	9,017	1.08	191,347	1.06
Lana (Lana)	45,311	.81	13,037	.70	5,518	.94	9,813	.78	27,223	.88	19,220	.77	12,974	.83	26,960	.79	20,527	.94	12,420	.95	2,230	.74	807	.99	154,105	.83
Yellowtail (Sala'd)	3,898	.61	2,217	.59	1,292	.62	3,261	.95	1,136	.55	1,629	.77	1,352	.50	437	1.03	2,112	.85	2,336	.70	2,849	.76	1,557	.65	24,476	.71
Lana (Serranillo)	39,904	.78	35,673	.78	43,575	.89	32,281	.72	32,474	.73	37,903	.76	29,450	.68	37,406	.64	40,656	.83	37,926	.71	35,997	.80	22,425	.69	423,870	.75
Yellowtail (Sala'd)	5,633	1.05	4,618	1.03	3,045	1.04	8,209	1.11	8,009	1.11	8,670	1.07	7,192	1.06	9,701	1.08	8,717	1.18	6,815	1.11	7,329	1.07	4,257	1.18	87,445	1.09
Yellowtail (Sala'd)	2,984	.92	3,561	.87	3,448	.89	4,294	1.00	4,771	.91	3,855	.92	2,868	.92	4,993	.97	2,656	.97	2,778	.92	2,650	.93	3,006	.92	41,764	.92
Yellowtail (Sala'd)	34,119	1.37	43,353	1.43	33,262	1.62	36,912	1.64	46,476	1.64	32,344	1.62	17,179	1.57	21,270	1.73	27,096	1.73	40,820	1.80	48,325	1.68	35,269	1.76	421,125	1.66
Yellowtail (Sala'd)	14,714	1.42	12,845	1.36	16,776	1.41	18,456	1.29	17,417	1.30	11,590	1.18	10,575	1.19	13,588	1.12	18,721	1.26	20,650	1.26	15,808	1.26	6,979	1.23	150,119	1.23
Yellowtail (Sala'd)	6,188	.86	6,445	1.16	4,884	1.02	3,579	1.04	8,181	.92	2,293	1.02	220	1.40	72	1.06	304	1.06	1,266	1.32	1,059	1.22	8,162	1.19	42,773	1.08
Yellowtail (Sala'd)	922	.70	1,113	.54	1,146	.87	627	.79	2,910	.48	2,753	.54	3,248	.43	808	.76	3,240	.60	2,281	.54	1,541	.42	1,129	.45	21,718	.55
Yellowtail (Sala'd)	4,376	.82	6,457	.69	7,844	.74	4,945	.73	2,752	.62	6,515	.78	3,486	.89	3,928	.85	7,134	.93	4,994	.78	3,404	.83	1,492	.75	57,327	.79
Yellowtail (Sala'd)	2,534	.92	5,006	.90	4,889	.86	2,910	1.43	17,515	.88	4,129	.93	8,230	.71	5,554	.88	4,301	1.08	3,555	.88	1,790	1.05	1,343	1.01	61,656	.51
Yellowtail (Sala'd)	11,090	.64	17,122	.65	21,663	.67	19,312	.50	18,386	.64	19,091	.69	17,858	.58	21,605	.67	27,214	.69	23,345	.73	17,246	.43	18,101	.63	232,029	.64
Yellowtail (Sala'd)	996	.73	662	1.30	208	1.07	151	.93	360	.70	2,300	1.17	359	1.71	1,118	.95	3,085	1.80	1,502	1.09	871	1.58	155	1.06	11,669	1.30
Yellowtail (Sala'd)	52,110	.96	33,534	1.01	22,861	1.23	26,886	1.05	29,830	1.06	30,495	1.07	22,126	1.05	27,434	1.03	28,394	1.12	31,979	1.10	25,154	1.03	23,968	1.10	322,771	1.05
Yellowtail (Sala'd)	717	1.06	1,603	.69	843	.67	1,474	.60	1,889	.79	1,227	.77	990	1.47	799	1.02	1,742	1.26	1,443	.61	538	.86	296	1.08	15,161	.83
Yellowtail (Sala'd)	5,923	1.19	5,044	1.11	3,818	1.17	4,849	1.08	5,557	1.16	5,909	1.11	14,708	1.01	4,170	1.08	5,774	1.22	5,876	1.15	4,301	1.19	2,348	1.11	68,007	1.22
Yellowtail (Sala'd)	6,547	.71	7,366	.66	9,104	.92	8,627	.62	9,103	.55	9,367	.62	6,059	.71	9,285	.77	7,425	.64	9,347	.66	5,865	.55	6,875	.57	94,862	.67
Yellowtail (Sala'd)	2,173	.85	3,598	.85	2,570	.96	3,222	.90	3,410	.94	1,087	1.12	1,820	1.09	1,017	1.05	2,828	1.07	3,529	1.02	1,230	1.12	735	1.09	27,179	.89
Yellowtail (Sala'd)	3,963	.70	4,659	1.00	5,580	.70	6,364	.64	6,153	.60	9,448	.65	10,548	.68	8,109	.56	8,493	.57	8,203	.63	5,540	.67	6,018	.74	83,104	.65
Yellowtail (Sala'd)	3,196	1.03	3,303	1.00	2,891	1.05	2,618	1.01	4,093	1.03	4,783	1.19	2,870	1.04	2,660	1.11	7,657	1.22	2,171	1.22	4,031	1.04	2,503	1.24	42,773	1.09
Yellowtail (Sala'd)	18,120	.65	13,634	.62	12,089	.58	8,278	.60	11,272	.57	10,759	.72	10,550	.60	11,442	.78	14,890	.76	15,912	.77	24,535	.78	16,032	.70	157,513	.69
Yellowtail (Sala'd)	5,487	1.04	6,384	1.03	6,798	1.10	6,428	1.04	6,340	1.09	6,980	1.04	4,597	1.05	8,003	1.03	6,130	1.66	6,157	1.08	4,995	1.07	3,911	1.11	70,210	1.11
Yellowtail (Sala'd)	3,238	.88	2,554	.87	2,758	.80	1,942	.88	2,185	.92	1,115	.90	499	1.15	1,248	1.25	1,980	.98	1,966	1.00	2,520	.98	949	.98	22,955	.93
Yellowtail (Sala'd)	16,868	1.13	21,255	1.19	16,701	1.13	23,071	1.18	28,569	1.19	34,114	1.24	23,943	1.25	20,844	1.19	23,742	1.20	14,746	1.16	9,097	1.16	9,123	1.12	242,373	1.13
Yellowtail (Sala'd)	29,603	.78	24,237	.80	18,514	.89	21,473	.82	19,328	.98	22,702	1.27	7,300	1.23	11,088	1.34	12,811	1.17	11,494	1.12	12,296	1.23	10,548	1.01	201,394	1.00
Yellowtail (Sala'd)	336,852	.94	395,833	1.01	322,855	1.01	281,019	1.01	332,380	1.02	306,053	1.03	211,361	.95	266,849	.97	310,748	1.06	288,705	1.05	255,831	1.06	199,527	1.05	1,375,743	1.01
Yellowtail (Sala'd)	25,502	1.23	32,987	1.29	36,582	1.29	42,600	1.36	45,440	1.16	43,935	1.24	30,294	1.27	30,119	1.38	32,157	1.30	37,290	1.41	43,110	1.35	37,520	1.54	437,436	1.31
Yellowtail (Sala'd)	30,536	3.28	25,229	3.42	30,724	3.43	29,208	3.35	20,574	3.43	22,895	3.49	17,893	3.51	21,701	3.60	26,824	3.67	26,493	3.90	26,081	3.67	16,070	3.86	257,259	3.50
Yellowtail (Sala'd)	4,586	1.27	4,110	1.30	5,425	1.23	4,465	1.25	6,270	2.03	4,150	1.30	4,245	1.22	4,840	1.25	7,694	1.50	3,929	1.30	3,745	1.25	51,059	1.39		
Yellowtail (Sala'd)	1,857	1.75	1,257	1.70	1,098	1.54	1,473	1.66	1,054	1.88	723	1.84	627	1.86	1,942	1.66	2,537	1.76	956	2.23	1,908	1.84	663	1.89	16,161	1.78
Yellowtail (Sala'd)	10	3.00	70	3.00					3	1.00															83	2.93
Yellowtail (Sala'd)	303	3.10	426	2.35	527	2.19	147	4.17	735	2.77	291	3.35	41	5.20	455	5.14	367	4.13	370	2.28	620	1.04	63	2.17	4,345	2.94
Yellowtail (Sala'd)	72,794	2.25	64,079	2.14	74,356	2.17	77,896	2.11	74,573	1.89	71,801	1.97	53,100	2.03	54,217	2.31	66,725	2.28	72,643	2.33	75,648	2.15	48,081	2.30	826,313	2.11
Yellowtail (Sala'd)	409,646	1.7	359,912	1.21	347,211	1.25	358,915	1.24	407,563	1.17	377,954	1.20	286,463	1.15	320,786	1.19	377,473	1.27	361,548	1.20	331,479	1.30	247,608	1.29	4,184,058	1.22

Table 23. Quantity and value of fish and shellfish by species and month for 1984.

Species (Especies)	January (Enero)		February (Febrero)		March (Marzo)		April (Abril)		May (Mayo)		June (Junio)		July (Julio)		August (Agosto)		September (Septiembre)		October (Octubre)		November (Noviembre)		December (Diciembre)		TOTAL		
	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L	Qty.	P/L		Qty.	
Line Snapper (Arroyado)	12,259	1.06	13,800	1.13	14,802	1.16	15,241	1.12	16,023	1.13	15,837	1.11	12,370	1.09	17,211	1.14	12,051	1.14	14,237	1.18	12,743	1.03	10,486	1.07	15,400	1.08	159,400
Tuna (Atún)	2,231	.63	1,872	.60	1,493	1.04	2,587	.58	7,256	.75	23,378	.74	6,270	.79	3,112	.77	3,833	.88	16,163	.87	1,204	.85	2,287	.93	71,000	.80	71,000
Yellowtail (Sala;G)	1,557	.71	1,629	.93	1,571	.91	2,423	.76	3,328	.53	421	.96	835	.89	420	.59	928	.96	1,762	.76	358	.92	620	.87	18,800	.80	18,800
Group (Sardinacarado)	29,616	.76	28,134	.78	30,720	.78	30,289	.86	38,229	.83	23,309	.84	31,285	.71	33,725	.85	22,625	.77	26,550	.79	30,574	.73	24,066	.76	22,800	.77	22,800
Yellowtail (Cachito)	5,465	1.10	6,376	1.09	7,246	1.24	5,020	1.17	4,526	1.27	5,373	1.06	5,109	1.15	6,142	1.05	8,140	1.06	8,355	1.08	6,157	1.10	3,826	1.04	75,000	.80	75,000
Blackfish (Cachito)	3,145	.83	3,301	.84	2,995	.85	3,397	.93	4,526	.95	3,998	.89	3,263	.91	4,559	.86	4,112	.86	4,569	1.00	4,317	.97	1,520	.88	42,000	.80	42,000
Black Snapper (Chillo)	25,611	1.82	33,031	1.74	34,949	1.77	36,974	1.75	32,827	1.30	30,111	1.82	21,975	1.75	22,376	1.84	30,031	1.76	36,641	1.71	33,220	1.82	23,044	1.73	27,000	1.70	27,000
Yellowtail (Colibrubia)	8,253	1.24	16,425	1.49	18,149	1.40	12,371	1.30	6,459	1.13	8,345	1.25	9,072	1.14	11,989	1.22	12,599	1.27	19,082	1.31	12,628	1.13	9,793	1.25	14,000	1.10	14,000
Yellowtail (Cachito)	2,936	1.37	2,404	1.22	283	.93	678	1.06	684	1.02	712	.91	20	1.00	253	1.84	436	1.25	1,117	1.09	2,421	1.19	3,458	1.29	18,000	1.00	18,000
Scorpaenid fish (Gallo)	25	.35	1,140	.42	1,211	.59	1,356	.55	674	.95	2,509	.42	595	.37	1,280	.64	958	.49	823	.53	60	.50	384	1.20	11,000	.80	11,000
Mullet (Curea)	3,151	.64	5,480	.86	3,324	.95	4,178	.94	4,528	.87	4,423	1.00	1,602	.90	4,819	.89	4,160	.88	4,257	.87	3,357	.96	2,447	.77	60,000	.80	60,000
Jack (Curea)	2,556	1.20	2,073	.95	2,314	1.01	4,628	.93	4,903	.97	3,324	.96	3,217	.77	1,595	1.07	2,012	.89	3,354	.65	3,169	.74	1,134	.90	3,000	.80	3,000
Parrotfish (Cero)	17,560	.76	15,257	.50	15,827	.70	17,490	.73	18,261	.76	17,869	.67	3,217	.77	1,595	1.07	2,012	.89	3,354	.65	3,169	.74	1,134	.90	3,000	.80	3,000
Blue Marlin (Marlin Azul)	261	1.90	375	1.44	739	.74	215	.60	229	1.26	534	1.25	20,402	.61	25,762	.66	20,780	.82	27,817	.75	23,418	.61	19,894	.63	20,000	.60	20,000
Group (Cero)	36,866	1.19	34,100	1.08	30,836	1.10	28,303	1.10	29,895	1.08	29,120	1.10	1,339	1.60	3,373	1.84	488	.90	1,121	1.28	361	1.00	428	1.61	8,000	1.00	8,000
Morays (Cachito)	1,229	.70	1,276	.57	1,477	.89	1,183	.71	1,522	.80	792	.87	25,641	1.09	32,164	1.07	30,224	1.10	22,390	1.11	22,555	1.04	24,582	1.04	24,000	1.00	24,000
Snappers (Cachito)	3,704	1.15	3,448	1.15	3,294	1.09	2,878	1.23	3,438	1.22	3,113	1.22	655	.88	831	.90	931	.81	784	.65	567	.77	620	.84	12,000	.80	12,000
Parrotfish (Faja Puercos)	8,851	.68	8,776	.74	9,204	.77	8,652	.89	7,374	.79	6,031	.74	5,466	.67	5,330	.70	6,673	.87	5,028	.73	3,535	.70	2,951	.71	81,000	.80	81,000
Sardines (Pinda)	1,492	.81	1,899	1.07	1,503	1.15	1,434	1.27	956	1.19	451	1.47	254	1.36	696	1.12	555	1.16	1,653	1.40	665	1.28	521	1.08	22,000	.80	22,000
Sea bream (Pinda)	4,376	.68	6,809	.73	5,747	1.23	4,229	.75	8,435	.66	7,980	.69	8,756	.61	6,934	.65	5,720	.61	4,721	.63	5,335	.60	2,016	.89	66,000	.80	66,000
Sea bream (Pinda)	1,246	1.08	2,925	1.18	2,438	1.10	3,310	1.25	4,838	1.22	1,894	1.26	2,624	1.07	4,825	1.67	2,774	1.06	2,613	1.15	1,837	1.04	823	1.37	11,000	1.00	11,000
Sea bream (Pinda)	17,418	.75	15,123	.73	11,122	.66	9,815	.72	8,865	.71	8,446	.91	8,142	.64	13,655	.78	11,059	.75	10,023	.67	11,310	.76	9,534	.71	15,000	.70	15,000
Group (Cachito)	5,600	1.04	6,323	1.11	5,039	1.23	6,017	1.15	3,828	1.07	3,662	1.16	7,549	1.26	5,171	1.15	4,625	1.13	4,469	1.11	3,512	1.02	2,809	1.05	11,000	1.00	11,000
Sea bream (Pinda)	3,026	1.53	2,342	1.00	1,789	1.03	3,212	.93	1,084	1.10	1,467	.93	922	1.08	1,540	.92	1,465	.97	2,153	.99	1,308	.96	559	.88	11,000	.80	11,000
Sea bream (Pinda)	8,499	1.12	12,021	1.20	18,800	1.36	15,196	1.26	15,763	1.20	21,643	1.23	15,665	1.23	18,397	1.19	15,905	1.16	6,520	1.15	9,818	1.03	14,565	1.06	17,000	1.00	17,000
Shark (Cachito)	22,573	1.02	13,874	1.10	20,701	1.04	16,821	1.17	13,063	1.04	16,774	1.14	2,126	1.00	1,458	.99	353	1.30	1,821	.71	503	.50	640	.60	7,000	.60	7,000
Other fish (Total peces)	212,024	1.26	240,056	1.08	248,228	1.17	272,217	1.12	248,221	1.08	241,621	1.08	112,286	1.00	245,346	1.08	228,359	1.03	250,784	1.06	210,719	1.03	180,471	1.00	200,000	1.00	200,000
Shrimp (Cachito)	44,521	1.28	25,482	1.37	32,421	1.24	34,187	1.22	32,424	1.22	28,324	1.43	23,324	1.32	20,420	1.41	23,221	1.20	22,545	1.42	18,845	1.40	22,144	1.42	24,000	1.40	24,000
Crabs (Cachito)	24,067	3.62	26,949	3.47	28,157	3.72	22,526	3.62	23,037	3.73	18,044	3.73	18,892	3.79	24,463	3.66	22,783	3.56	24,589	3.70	28,741	3.69	19,895	3.59	28,000	3.60	28,000
Group (Cachito)	3,239	1.26	3,463	1.25	3,404	1.25	1,870	1.23	3,679	1.25	3,114	1.27	4,020	1.25	4,270	1.24	3,822	1.25	3,713	1.25	3,342	1.25	3,384	1.26	47,000	1.20	47,000
Lang Crab (Cachito)	1,505	1.23	1,031	1.78	863	1.37	714	1.35	1,093	1.97	977	2.08	479	1.98	1,193	1.94	2,512	1.72	3,320	1.80	2,619	1.80	1,558	2.13	17,000	1.80	17,000
Sea bream (Cachito)	95	1.93	411	1.54	170	3.00	409	3.00	810	3.00	733	3.00	505	3.00	40	3.00	270	3.00	739	3.00	10	3.00	10	3.00	3,000	3.00	3,000
Shellfish (Total mariscos)	75,407	2.04	60,517	2.31	48,260	2.22	62,528	2.16	63,073	2.21	51,017	2.20	549	2.39	757	2.62	119	2.10	89	2.10			200	2.00	1,000	2.00	1,000
TOTAL (TOTAL)	284,221	1.31	300,653	1.33	312,603	1.29	320,446	1.24	312,724	1.24	292,438	1.29	148,014	1.22	316,269	1.31	286,696	1.30	315,820	1.32	261,266	1.35	222,172	1.30	240,000	1.30	240,000
Shrimp (Cachito)	24,067	3.62	26,949	3.47	28,157	3.72	22,526	3.62	23,037	3.73	18,044	3.73	18,892	3.79	24,463	3.66	22,783	3.56	24,589	3.70	28,741	3.69	19,895	3.59	28,000	3.60	28,000
Lang Crab (Cachito)	1,505	1.23	1,031	1.78	863	1.37	714	1.35	1,093	1.97	977	2.08	479	1.98	1,193	1.94	2,512	1.72	3,320	1.80	2,619	1.80	1,558	2.13	17,000	1.80	17,000